

SITOP smart

1-phase, 24 V DC

Ordering data	Article No.	Accessories	Article No.
SITOP PSU100S 1-phase, 24 V DC/2.5 A Stabilized power supply Input: 120/230 V AC Output: 24 V DC/2.5 A	6EP1332-2BA20	SITOP PSE202U redundancy module Input/output: 24 V DC/40 A suitable for decoupling two SITOP power supplies with a maximum of 20 A output current	6EP1961-3BA21
SITOP PSU100S 1-phase, 24 V DC/5 A Stabilized power supply Input: 120/230 V AC Output: 24 V DC/5 A	6EP1333-2BA20	SITOP PSE202U redundancy module Input/output: 24 V DC/NEC Class 2 suitable for decoupling two SITOP power supplies output power limited < 100 VA	6EP1962-2BA00
SITOP PSU100S 1-phase, 24 V DC/10 A Stabilized power supply Input: 120/230 V AC Output: 24 V DC / 10 A	6EP1334-2BA20	SITOP PSE202U redundancy module Input/output: 24 V DC/10 A suitable for decoupling two SITOP power supplies with a maximum of 5 A output current	6EP1964-2BA00
SITOP PSU100S 1-phase, 24 V DC/20 A Stabilized power supply Input: 120/230 V AC Output: 24 V DC/20 A	6EP1336-2BA10	SITOP PSE200U 3 A selectivity module 4-channel selectivity module Input: 24 V DC Output: 24 V DC/3 A per channel Adjustable response threshold 0.5 ... 3 A • With common alarm signal • With single-channel signaling	6EP1961-2BA11 6EP1961-2BA31
		SITOP PSE200U 3 A NEC Class 2 selectivity module 4-channel selectivity module Input: 24 V DC Output: 24 V DC/3 A per channel Adjustable response threshold 0.5 ... 3 A • With common alarm signal • With single-channel signaling	6EP1961-2BA51 6EP1961-2BA61
		SITOP PSE200U 10 A selectivity module 4-channel selectivity module Input: 24 V DC Output: 24 V DC/10 A per channel Adjustable response threshold 3 ... 10 A • With common alarm signal • With single-channel signaling	6EP1961-2BA21 6EP1961-2BA41
		SITOP PSE201U buffer module For SITOP smart and SITOP modular buffer time 100 ms to 10 s dependent on load current	6EP1961-3BA01

More information

Select the appropriate power supply quickly and easily with the SITOP Selection Tool:

<http://www.siemens.com/sitop-selection-tool>

Overview



The SITOP PSE201U buffer module bypasses short-term power failures lasting a few seconds and can be used with all 24 V power supplies of the SITOP smart or SITOP modular product lines. The buffer module is equipped with maintenance-free capacitors and automatically takes over the 24 V power supply in case of a power supply failure.

The SITOP DC UPS modules offer protection in the event of extended power failures. The maintenance-free **DC UPS with capacitors** are able to reliably supply 24 V for several minutes, and the **DC UPS with battery modules** for several hours.

Benefits

- Bridging of short-term power failures in the time range of seconds
- Totally maintenance-free capacitors as energy storage
- Short charging times
- Parallel switching of several buffer modules possible
- Fast mounting onto standard rail and simple wiring

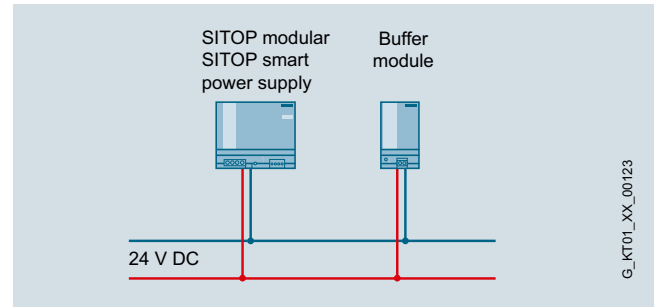
Application

With short-term power failures, the load current is backed up without interruption via the buffer module in combination with a SITOP smart or SITOP modular 24 V stabilized power supply.

Buffer times:

- 200 ms at 40 A
- 400 ms at 20 A
- 800 ms at 10 A

You can connect up to 8 buffer modules in parallel to extend the buffer time (max. 10 s).



Design

The buffer module is connected in parallel to the output of the SITOP smart or SITOP modular power supply. The connection to the power supply takes place via only 2 cables.

Function

Buffering

In case of a power failure, the buffer module supplies the load current for the 24 V power supply by means of its energy storage units. Maintenance-free capacitors are used as energy storage units.

Signaling

The LED on the device signals a supply voltage > 20.5 V.

Add-on modules

Buffer module

Technical specifications

Article No.	6EP1961-3BA01 SITOP PSE201U buffer module
Input/Output	Stabilized, isolated DC voltage
Rated voltage $U_{in \text{ rated}}$	24 V DC
Voltage range	24 ... 28.8 V
Control input	-
Rated output voltage $U_{out \text{ rated}}$	U_{in} – approx. 1 V
Rated current $I_{out \text{ rated}}$	40 A
Mains buffering	Backup time: <ul style="list-style-type: none"> • With 40 A load current: 200 ms • With 20 A load current: 400 ms • With 10 A load current: 800 ms • With 5 A load current: 1.6 s Reduces the backup time by 100 ms in combination with 6EP1 437-3BA10.
Buffering time, max.	10 s
Protection and monitoring	
Current limiting, static	Typ. 40 A
Short-circuit protection	Electronically
Signaling/alarm signals	
Status display	Green LED for "Supply voltage > 20.5 V"
Signaling	-
Safety	
Galvanic isolation	Yes, SELV acc. to EN 60950-1
Safety class	Class I
Safety test	Yes
CE marking	Yes
UL/cUL (CSA) approval	UL-Listed (UL 508) File E197259, CSA (CSA C22.2 No. 14, CSA C22.2 No. 107.1)
Explosion protection	-
Degree of protection (EN 60529)	IP20
EMC	
Emitted interference	EN 55022 Class B
Noise immunity	EN 61000-6-2
Operating data	
Ambient temperature range	0 ... +60 °C with natural convection
Transport and storage temperature range	-40 ... +85°C
Humidity class	Climate class 3K3 according to EN 60721, no condensation
Mechanics	
Connections	One screw-type terminal each for + and - for 0.5 ... 10 mm ² solid/finely stranded
Dimensions (W x H x D) in mm	70 x 125 x 125
Weight, approx.	1.2 kg
Mounting	Can be snapped onto standard mounting rail EN 60715 35x7.5/15

Ordering data

SITOP PSE201U buffer module

For SITOP smart and SITOP modular
buffer time 100 ms to 10 s
dependent on load current

Article No.

6EP1961-3BA01